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NOVEMBER, 1881.

IN THE AUGUST NUMBER we gave sketches of several summer resorts, and said "we had hoped to visit some of them, but when this number of the MAGAZINE is before our readers we shall be among the parks and gardens of Europe, about which we hope to give some information in future numbers." On the seventh of July we left home and all those pleasant places behind, and, not without a little home-sickness, commenced the journey across the Atlantic in the steamship City of Brussels. On boarding the ship it was pleasant to recognize and be recognized by the Captain, with whom we crossed the ocean ten years before; Captain CONRAD then being first-mate. The weather was fine, the company lively and agreeable, and we enjoyed what our friends think we much needed, ten days of entire rest. Sea voyages have been often described, and are so much alike that we shall not trouble our readers with any stories of whales, or porpoises, or sunsets. Every one was anxious to hear from the President, and all waited for the news at Queenstown, though we did not reach that port until long after midnight. Hearty were the cheers when the boat from shore brought the news that GARFIELD was alive and the prospects were favorable for recovery.

After a voyage of ten days and a few hours we reached Liverpool, during a

spell of the dryest and warmest weather that had been known for many years. So unusual and intense was the heat that many cattle and hogs that were being exhibited at the Royal Agricultural show, then being held at Derby, suffered, and some died. We almost immediately made our way to London, where, after a stay of a day or so, just to say good-day to our friends in that city, we visited the seed-growing districts of the County of Essex, and were kindly entertained by Mr. DUNNETT and family, at his beautiful home in Dedham, which is surrounded by scores of acres of flowers grown for the production of seed. After a pleasant, but all too short a stay, being anxious to look at the bulbs in Holland while they were being taken from the ground, we took the cars for Harwich and crossed the North Sea to Rotterdam, a curious Dutch town.

HOLLAND.

Holland is not a picturesque, but is a very interesting country to the traveler, and particularly to the florist, for it supplies the world with some of its choicest floral treasures. From Holland are obtained Tulips and Hyacinths and all the well-known Holland bulbs. The country, as is well known, is flat, save a few sandhills, called *dunes*, which were evidently formed by the sea, that have the appearance of sand bars. Indeed, much of Hol-

land has been reclaimed from the ocean, and the country has now a third more acres in cultivation than forty or fifty years ago. Everything about it is new and wonderfully strange. In Rotterdam

mud, so it was necessary to drive logs down to secure anything like a foundation; but these must have sunken unevenly, and the wonder to the traveler is

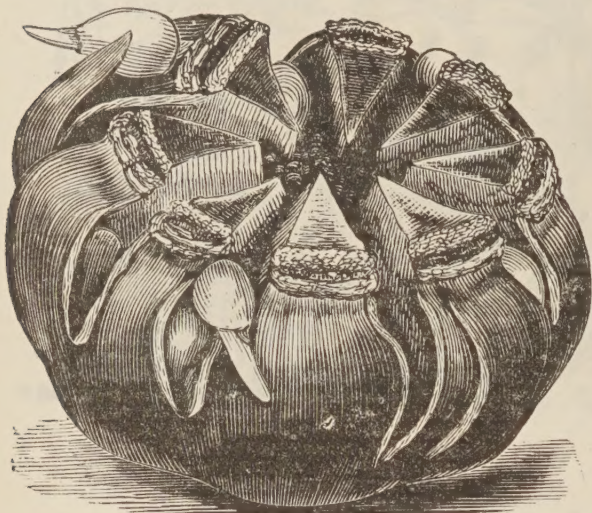


FIG. 1. BULB PREPARED FOR PROPAGATION.



FIG. 2. BULB PREPARED FOR PROPAGATION.

and Amsterdam the centers of many of the streets are canals, and the heavy *carting* is done by boats. The houses are tall, many of them very old, with strange-looking, pointed gables, and in the latter place all the houses seem to be intoxicated, and lean and twist in every way possible. The city is built on the

why the houses do not tumble down. Instead of fences, the fields are separated by ditches of water five or six feet in width, and most of the transportation of farm produce is done by boats on these ditches or small canals. Instead of gates, bridges are used for the passage of cattle from one field to another; some of these



FIG. 3. PROPAGATION OF HYACINTHS.



FIGURE 4.

little bridges, we noticed, were removed when it was designed to pen the cattle in the fields, while others were furnished with a gate at one end. The country is so level there is no natural drainage, and the surplus water is removed by pumping, the pumps being worked by wind-power. Wind-mills are scattered all over the country. The return of the water is prevented by dykes, or banks of earth, and the heavy dykes on the sea-coast prevent the inundation of the country, for much of it is below the sea.

When we visited Holland, about the twentieth of July, the water in the ditches was from a foot to eighteen inches below the level of the soil, but in the winter much of the country is overflowed. This, however, would destroy the Hyacinths, so they are planted in soil a foot or so higher than the usual level, and this is often raised artificially at great expense. The soil is blackish muck, with a good proportion of clean sand, and so porous and free from stones that no implement is used in taking up bulbs; they are taken out with the hands, and about as rapidly as a hen would pick up corn.

All who have had experience with Hyacinths know that little, pointed bulbs form at the base of the large ones, which, after becoming large enough to form roots, may be removed from the parent bulb and put out to grow to flowering-size, which they will do in two or three years. These, however, do not furnish young bulbs as fast as the growers require, and recourse is had to other methods to hasten their production. Our readers may not make

any practical use of the information, but we thought the facts would be at least interesting. One plan is to make cuts across the base of the bulb, as shown in the engraving, figure 1. This is done in June, after flowering, and the cut bulbs are replaced in the ground. They throw out around the cuts a great many young bulbs, as shown at figure 3. These are planted in a mass, without separation the first season, the second divided, and in three years make strong flowering-bulbs.

Another plan is to cut about one-third of the base of the bulb entirely away, leaving it somewhat hollow, as shown in the engraving, figure 2. This is not done until July or August. By this process an immense number of young bulbs are formed from the cut scales, but not as large in size as by the previous process, as will be seen by figure 4. New sorts are, of course, grown from seed, and seedlings bloom the fourth year.

After taking a good look at Rotterdam, the appearance of which, with its canals, we have endeavored to show in the engraving, we made our way to Leiden, where we found Mr. DEGRAAF, as jolly and good-looking a Dutchman as ever lived, waiting to receive us. By the street-cars we soon reached his extensive grounds, where are grown many curious and choice bulbs, the Lilies being mostly in flower. The streets of Dutch towns are narrow, many with barely room for the street-cars, so that the driver almost constantly tolls a large bell, suspended near him, to warn every one of the approach of the cars.



ROTTERDAM.

Our next stopping place was Haarlem, the center of the Hyacinth-growing district, where all our wants, and much more, were supplied by our old friends, the ELDERING BROTHERS. They were busily engaged taking up and curing Hyacinths, but gave us time that we thought could be ill spared, though to us a very pleasant sacrifice. We like the Holland people. They are quiet and contented, and seem to enjoy all the comfort and pleasure within reach. In front of many of the residences mirrors are placed, supported by iron rods or brackets, and at such an angle that persons sitting near the windows can see all who approach the door, and the lady of the house is ready to receive her guest before he can ring the bell. This is pleasant, much better than keeping a friend standing foolishly waiting while the lady whom we desire to see retires for a few minutes to part her hair or arrange her ruffles.

GERMANY.

After a very brief stay at Amsterdam, a very curious and busy city, with its houses standing all ways except upright, we hastened to Berlin, and spent a few days at the capital of Germany, seeing some of its wonders and resting for a few moments "unter den Lindens;" but their glory has departed never to return. They are now neither useful nor ornamental. After taking a look at Brandenburg and Leipzig, we were glad to find ourselves in the

little old city of Erfurt, where a longer stay was to be made, for in its vicinity immense quantities of seeds are raised, and here reside some of the most enterprising and intelligent growers. Here, too, we had friends with whom, long years ago, we spent many pleasant days, so it seemed a little like home, and a good place to rest. As on previous occasions, we received the kindest attention and the most liberal hospitality from our old friend, ERNST BENARY, and family. Mr. B. embracing the opportunity at the close of one generous entertainment, to state the fact to the assembly that we had been doing business with each other for more than twenty years without one unpleasant word or the difference of a penny. To J. C. SMITH we are also indebted for many attentions, which was only saddened by the fact that through sickness our host was unable to enjoy them with us.

For miles around we visited the growing seed crops, seeking pleasure and information, and sought not in vain. Erfurt was a strongly fortified town, or fortress, but the fortifications are being removed, and the same is true of many places in England and on the Continent, as the change in modern warfare has rendered them useless.

In most places in Germany there are no fences, as in this country; no hedges, as in England, and no ditches, as described in Holland. You observe thousands of

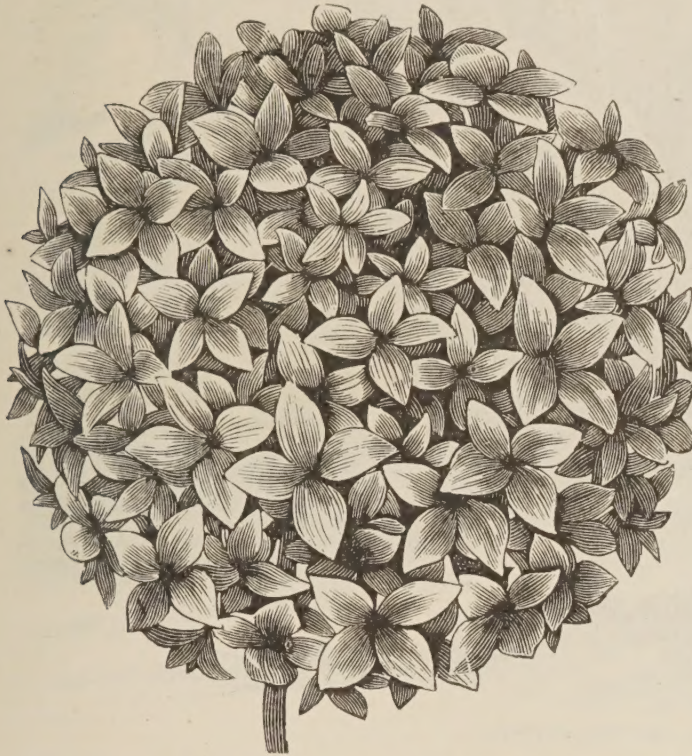
acres, and no division between the fields except a land-mark, known to the owners, no doubt, but generally unseen by the traveler. No animal is allowed to graze, all the feed being cut and carried to the barns and yards. There are no farm-houses, as we have in America, scattered all over the land; none of the pretty,

authorities of gardening, is one of the most splendid plants which are introduced in last time. The characteristic train of this new form is that the corollas of the wreath as well as that of the disk of the flower-head are transformed into much prolonged, infundibuliformly enlarged, regularly 4—5 cleft tubular flowers which altogether form an ensemble as elegant as interesting."

To show the difference we present an engraving of the single Gaillardia, though doubtless it is familiar to most of our readers. As single flowers are now "the style," perhaps this will not be considered by some any improvement.

It was not without regret we bade our friends in Erfurt good-bye and took up our journey for Frankfort, Mayence, and the Rhine. No river in Europe, and none, perhaps, in the world, is so honored and lauded by travelers, and certainly there is none whose praises have been so sweetly sung by the world of poets. Taking the steamer at Mayence, one morning, we spent the day on its waters, arriving at Cologne in the evening. Its banks are steep for much of the distance, in many places terraced at

great expense of labor, for the growth of the vine, and its vine-clad hills are known in story and song. A lady in our hearing remarked that it was well that everybody knew the banks of the Rhine were planted



GAILLARDIA PICTA LORENZIANA.

thatched cottages of England, with their beautiful flower-gardens—not even a barn. You look in every direction, and see nothing but a cultivated expanse, without a house or animal in sight. As you pass on you soon come to a little village of a hundred houses, perhaps, and possibly observe a spire pointing upwards from somewhere near the center of the village. Perhaps another and a somewhat similar village may be seen miles in the distance. The farmers all live in these villages, and go out to their work in the morning, returning in the evening. Here they have their schools, church, and place of amusement.

In the neighborhood of Erfurt, on the grounds of CHR. LORENZ, we saw a very pretty novelty, a double variety of Gaillardia picta, which has been named Gaillardia picta Lorenziana, which Mr. L. thus describes, in rather curious English, and of which we give an engraving. It will be seen to be quite different from the old single flower:

"I am happy to can offer this Gaillardia a novelty which, after the judgment of



SINGLE GAILLARDIA.

with Grapevines, or travelers might have supposed them to be Beans and Bean-poles. The vines are supported each by a single stake. We have selected, we think, the prettiest view on the whole river for an illustration. Some Americans have claimed that the Hudson was quite as beautiful as the Rhine, but it is



SCENE ON THE RHINE.

useless to make any comparison between the two, they are so entirely different, and both beautiful. We shall not annoy our readers with any of the silly legends of the Rhine, but hasten to Cologne, which has, it is said, the finest specimen of gothic architecture in the world, in its cathedral; of this we are incompetent to judge, but we do say it is the dirtiest city we ever saw, and abounds in more, and more infamous, smells than any city we have ever visited. Its gutters and streets are filthy beyond endurance. It was to counteract these stench, we suppose, that Cologne water was invented at this place, and named in its honor. It was with no reluctance, therefore, that, after a supper at the Hotel du Nord, we escaped for

FRANCE

and its gay city, Paris. Everybody has heard of the beauty of Paris, its well-paved streets, fine boulevards, palaces, triumphal arches, galleries of paintings, parks, gardens, &c.

We first visited the palace and gardens of Versailles, but the garden part was anything but satisfactory. We found scarcely a square yard of decent lawn,

while the clipped hedges were broken with many unsightly gaps. Unfortunately the fountains were quiet, for they play only two or three hours on the first Sunday afternoon of each month, and it is said each exhibition costs two thousand dollars. The dry fountains and stagnant waters are very dull.

Paris is not picturesque, like Edinburgh, but it is a tasteful city, with a good deal of polish. Its broad avenues are a delight, and in the night are truly gorgeous, for they are brilliantly lighted, either by electricity or gas, thronged with carriages, all having their lamps burning, while on every hand are open-air concerts and theatrical performances. The Parisians seem to belong to the owl family, for the streets that are comparatively deserted in the daytime are crowded from nine or ten at night until two or three in the morning. People seem to eat and drink as well as enjoy amusements in the open air, for every night crowds are to be seen sitting at little tables on the sidewalks in front of the restaurants, and this is kept up until long after midnight.

What pleased us most was the number



INN ON THE ISLE OF WIGHT.

of small, well-kept squares or parks within easy access of every part of the city, and these all were provided with plenty of seats for the comfort of the people. To strangers, Paris is the dearest city in the world, and, we were told, is losing much of the patronage of travelers from this cause. We visited the old seed-firm of VILMORIN, ANDRIEUX & Co., and were kindly shown the workings of their large and successful establishment.

What surprised us was the fighting spirit of the French people. Even sensible business men who should know better, are looking forward to the time when they will be strong enough to whip the Germans; some putting the time at four years hence. We told them very freely that their best revenge upon the German Emperor was to keep their republic in good condition, and its effect would not be lost upon Germany. That the people of France had nothing to do with, and should take no interest in that quarrel and fight of their last foolish Emperor whom they had driven from his throne for his folly. The French, however, are an excitable people, and if they did not

overwhelm us with argument, they did so with their language.

Leaving Paris for Boulogne, on the sea, we bade adieu to France, and made a very pleasant passage across the British Channel.

ENGLAND.

Arriving at Folkestone, a pretty seaside village and a delightful summer resort, after an hour or two, we made our way as fast as the railroad train would carry us, to the South of England, Portsmouth, Southampton, and the Isle of Wight, for a rest. During a month or more we had traveled, observed, thought, and talked so much we felt that a few days of quiet would be pleasant, at least, and we knew no better place for such a purpose than the neighborhood of Portsmouth. particularly that beautiful little Isle of Wight, which has such pet names as "English Madeira," and the like. Fortunately, we had friends there, so to us it was doubly pleasant. We know of no spot in the wide world where more of health and solid comfort can be obtained by the traveler, if he will only settle down quietly and make a home of one of the delight-



ENGLISH COUNTRY ROAD.

ful inns of this island. It is about twenty miles in length by some thirteen in the widest part. The channel between it and Portsmouth and Southampton is called the Solent, usually, though the part between the Island and Portsmouth is known as Spithead, and this is the anchorage of all ships of war. The Royal Yacht Club of England has its club-house and Admiral's Station at the town of Cowes, and a trip around the Island is the course of the yachts in all races.

The surface of the island is beautifully diversified, and on this account has been called England in miniature. The western end is mainly broad downs and high cliffs, while the center and eastern portion is dotted over with pretty cottages and splendid residences, and rural villages, and magnificent sea views. A good portion of these high hills are called "downs," composed mainly of chalk, with a very thin covering of earth, and producing a short, sweet, velvety grass, as smooth as a lawn, with occasional patches of heath. For mildness and salubrity of climate the Isle of Wight is not equaled by any island on the coast, and here the wealthy of London, and other large cities, retreat to spend their summer vacation.

The Queen has her marine residence, Osborne house, near Cowes.

It was our fortune to visit this place during the Cowes regatta, and it was with some difficulty our little steamer could make her way among the scores of pleasure yachts of all descriptions, from the magnificent royal steam yacht of the Queen, and that of the Prince of Wales, to the little craft not much larger than a row boat. A few miles inland is the town of Newport, and near the celebrated ruin of Carisbrook Castle, in which Charles I was imprisoned.

One of the pleasantest excursions is from Ryde to Ventnor, that is, across the island, thence on the back of the island along the shore towards what

are called the Needle Rocks, at the end of the island, as far as the village of Niton and the celebrated gorge known as Black Gang Chine. This road is a very pleasant one, and is in some respects a specimen of English country lanes, so much so that we cannot resist the temptation to give a view of a section a few miles out of Ventnor, and between this place and Sand Rock. It is smooth as a floor, and we judge not more than twenty feet in width. With such roads it is not strange that ladies walk the island around; indeed, walking seems to be quite the fashion, for we saw scores of ladies, armed with umbrellas, on a regular tramp, and for this they seemed entirely fitted. The English ladies love to walk. Those who take this road should call for their luncheon or dinner at the Royal Sandrock Hotel, a charming little place that we discovered ten years ago and were glad to see again, just as we left it, with the same shady porches covered with the same Ivy and Roses, and the same waiting-maid, with the same white cap and rosy cheeks. This hotel is like many of the rural hotels on the island, and they are all that heart can desire.

The few days allotted for pleasure



SCENE ON THE THAMES.

among friends in this vicinity passed away all too soon, and left only about ten days in which to see London and its surroundings. We were compelled, therefore, to hasten our departure from good friends at Portsmouth, and a few hours found us in London, the greatest city of Europe. We had hardly shaken the country dust from our shoes, when our old friend, BEALE, of the seed-house of JAMES CARTER & CO. took possession of us and was bound to show us the Thames, that mighty river that carries on its bosom the commerce of half the world, in comparison with which, some people we have seen, think the Mississippi and the Amazon are mere brooks. So a party was formed, and at about six o'clock one fine morning, and mornings of this character are not very common in England, and six o'clock is not a very seasonable hour at which to arise, in the view of an Englishman, we entered a first-class car. It has been said that none but fools and Americans ride first-class; but this is not strictly true, for our English friends were certainly not Americans, and we do not believe they could be fairly placed with the other class named. But, not to discuss this point further, we state briefly our destination was Oxford, the head of Thames navigation, which is about sixty miles from London by railroad and one hundred and ten miles by river.

Our objective point was reached in about two hours. We had a look at this old university town for an hour, when the officers of the passenger steamer, which was anchored in the river, announced by the ringing of bells and other devices, the fact that the ship was about to start for London. It was our intention to return to London by steamer, so as to form a better acquaintance with this celebrated river in all its windings and ramifications.

A tender took us on board, the anchor was raised, the steam whistle announced our departure, and, with confidence in the skill and care of officers and crew, we felt quite hopeful of a happy termination of our voyage, though knowing no more of what was before us than did Columbus in his hazardous voyages. Our steamer was propelled by a screw, and not by side-wheels, as the side-wheelers are found to consume a greater amount of coal, an important item in steam navigation. The summer had been unusually dry, the water in the river was low, the bottom of the steamer scraped the bottom of the river about half of the time, and the screw threw up mud and stones at such a fearful rate that it was unpleasant, if not dangerous, to be near the stern of the ship. Either from straining from the habit it had of running over the bottom, like a stone-boat, or from some other cause, our steamer leaked, and but



WINDSOR CASTLE, ON THE THAMES.

for the assistance rendered by the second Steward, with a tin-cup and pail, the consequences might have been serious. However, we surmounted all dangers, and by borrowing a lump of coal of a passing steamship, managed to get within three or four miles of Henley. Here we were caught in something of a gale, the ship would not answer promptly to her helm, and, in rounding a cape, struck the shore with her bow, when the stern swung around and fastened on the other bank, and there, in spite of the efforts of officers, crew, cook, and passengers, we remained more than an hour, blockading the river, and stopping for more than sixty minutes the entire navigation of this section of the Thames.

While others were at work with ropes and crow-bars to free the ship, we embraced the opportunity to take a sketch of the river just above, which we present to our readers. Of course we do not show our steamer in its humiliating position, which was only temporary, for after much labor we succeeded in getting afloat, made good progress to Henley, and laid up for the night, the passengers retiring to the Red Lion Hotel for refreshment and rest, having followed the river in its windings forty-seven miles during the day. A series of resolutions compliment-

ing the officers for faithfulness under trying circumstances were adopted unanimously.

Next morning the journey was resumed and it would be difficult to find more charming river scenery than is to be seen between Henley and Kingston. At the former place the river begins to widen and deepen, its banks become picturesque, beautifully wooded, and embellished with elegant country seats. About twenty miles from Kingston, on elevated ground, is Windsor Castle, of which a fine view is obtained from the river. It was commenced by William the Conqueror, and has ever since been the home of England's kings and queens, and almost every one has made additions to it until it has become almost a city of palaces. All but the private apartments are open to the public, at least, when the Queen is not at home. From the keep, or round tower, the view, embracing several counties, is the finest we enjoyed in Europe.

At the two most celebrated Dahlia-growing establishments of the world, that of KEYNE & Co., of Salisbury, and TURNER, of Slough, we spent two pleasant days. Great numbers of seedling Dahlias are grown by these gentlemen every year, from which a few of the choicest are selected, named and intro-

duced, and among the names so honored we found our own attached to the best flower of last year by Mr. KEYNE. The greatest pains are taken to grow flowers for the Dahlia shows by sheltering the flowers from sun and rain, each flower designed for the purpose being protected by a little umbrella, and the exhibitions are truly gorgeous.

BEDDING PLANTS.

The colored plate of this issue is an attempt to show the general appearance of some of the popular plants used for carpet beds. Our readers will, no doubt, concede the attempt was a worthy one however far they may adjudge we have come short in accomplishing it. Such plants seen in a mass and singly appear very differently; the colors, too, are so blended and so variable with the different conditions of the plant that we offer these facts in explanation of the partial success only that has been reached in their portrayal. However, one will receive from the plate a fair general idea of these plants.

The term, bedding plants, has long been in use, and is applied to all those tender plants that, preserved through the winter under glass, are there propagated and raised, and finally planted in beds in the spring to serve for the decoration of the garden for one season. Such plants are Geraniums, Heliotropes, Verbenas, Lantanas, and a multitude of other flowering plants.

The use of plants with high-colored foliage closely bedded with their colors contrasting, and arranged so as to exhibit distinct patterns is quite a modern practice, and has grown up within the last quarter of a century; it is yet in its infancy, apparently, in this country. Carpet-bedding, or mosaiculture, as it is sometimes called, has found favor with us, and will, probably, be greatly extended, within certain limits, and for particular places it is very desirable, and there is little danger of its taking the place of flower-gardening proper; its expensiveness, for one reason, and the difficulty of procuring at short notice just what one may fancy, and the consequent necessity of taking what is to be had, for another, are sufficient to keep this mode of planting within comparatively narrow limits.

In fact, pure carpet-bedding is but little seen, taking the country through, the nearest approach to it being a mixture of flowering with foliage plants; and there is no question that this method of planting will continue to be entirely satisfactory and more popular than strict carpet-bedding. Carpet-beds may be employed to great advantage in spots that are exposed to the full and near gaze of many passers, and there are many little places in populous towns and cities where a bit of green lawn may be enlivened the whole season with a bright carpet-bed. Nothing can look neater than such a bed well-kept. This style of gardening is admissible only with grounds kept in elegant condition; otherwise it would be like jewels in a swine's snout.

In unfavorable seasons, when flowering plants are suffering from the effects of the weather, carpet-beds may still appear to great advantage. A writer in the *Journal of Horticulture*, in September, notices the condition of the carpet-beds in connection with the great rain-fall for a few weeks previous. It appears the rains in England had been so copious as to do great damage. He remarks: "Although, perhaps, of secondary importance, it is, to say the least, very annoying to see the labor of many months not merely spoilt, but positively rendered unsightly by the continual prevalence of wet weather, and this, too, at a time when many of us are most anxious to have things at their best. The start made in the first instance was not very encouraging, as many of the more tender kinds were injured by the late frosts; and now, when everything was beginning to brighten, comes the 'damper.'"

The result of all the wet weather in his own language, is that "with a few noticeable exceptions," the whole presents "more the appearance of breaking-up time than August." He then further adds, "my object, however, in penning these lines is not because I am in a grumbling humor, but more especially with the intention of directing attention to the carpet-beds, which in our case are the only bright spots in the general desolation." The writer disclaims that he is an enthusiast on the subject of carpet-beds, but concludes by saying, "there is no disguising the fact that carpet-beds are first to be attractive and the last to succumb to the

effects of unfavorable weather." The character of the weather here has been just the reverse of that in England. August and September were exceedingly dry, as all are well aware; not only was there an entire absence of rains for many weeks, but hot winds from time to time would pass over the country, licking up every drop of moisture and draining it from the plants and animals. During this trying time, while the flowering plants were pinched and gave only some small, poor flowers, the carpet-beds appeared fairly well, although unnecessary to say that a lack of water is no benefit to them.

Among foliage plants the Golden Feverfew, *Pyrethrum aureum* of the catalogues, occupies an exceptional place, for it is so hardy that it stands out without protection through our severest winters. It is a low, compact plant, of a golden-green color, and when in full vigor is very striking and handsome. It is much employed, and its good qualities will retain for it its popularity.

Centaurea gymnocarpa is a beautiful, low plant, the habit and color of which are well shown in the colored plate. The leaves, which are cut something like a Fern, and covered with soft, woolly or cottony-hairs, giving it a whitish appearance, curve gracefully outwards in every direction from the center of the plant. This plant may be used to advantage in many combinations, but it shows itself especially well on the margin of a bed.

The *Coleus* for bedding is more used than any other plant, and the varieties of it are almost innumerable. Every spring many new ones are offered which have been originated from seed, and they present some wonderful combinations of colors. *Coleus Hero* is a very dark indigo-purple, or maroon-purple, appearing at a little distance nearly black; it is very much darker than shown in the plate, hence it is particularly valuable for contrasting with light colors. But it is not our purpose now to describe varieties of *Coleus*; florists' catalogues give them in great numbers. The beauty of foliage that this plant presents must always make it admirable.

Several varieties of *Achyranthes* are standard bedding plants; among the principal ones are *A. Verschaffeltii* represented in the plate, *A. Lindenii*, *A. aurea reticulata*, *A. Hoveyii*, and *A. Carseii*, but

there are others that differ somewhat in coloring from all these.

The *Alternantheras* are very bushy, compact, and lower-growing than any of the plants yet mentioned. Of these there are a number of varieties, and they are among the most valuable of bedding plants.

Besides the plants already mentioned we may name as those that always serve a good purpose in bedding, low-growing *Lobelias*, *Sedums*, *Echeverias*, *Thymus citriodorus aureus*, *Perilla Nankinense*, and many others.

Most commonly some of these foliage plants are used in connection with *Geraniums*, *Heliotropes*, *Phlox Drummondii*, *Verbenas*, *Petunias*, *Lantanas*, and other flowering plants, as also with the variegated-leaved *Geraniums*.

To keep a carpet-bed in order, it is necessary to watch it, and all through the season keep it so clipped, whenever a plant shows a disposition to overreach its neighbor, that the surface will appear as even as possible. Some experience is needed before one is able to plant a bed successfully; the habit of each kind of plant employed must be known and the treatment it requires. By skilfully making up a bed and forming its surface according to the plants to be used, one may often employ plants that would be comparatively worthless in the hands of the novice.

The inquiry is often made by amateurs, how *Coleus*, *Achyranthes*, and other tender bedding plants may be kept over winter, with the idea that they may be again planted the following summer. In general it will be found less costly to let the frost take the plants in autumn and to purchase again in the spring than to try to keep them in the house. Young plants only are valuable for planting out, and if one has no facility for propagating them it is better to let the old plants go; attempts to winter them in the house would ordinarily result in failure.

Carpet-bedding is not a work to be undertaken at a moment's notice; on the contrary, one must decide with precision upon the size of the beds, the pattern of each must be sketched and, if possible, painted in colors, that the effect of the whole may be determined; good carpet-bedding requires the combined skill of an artist and a gardener.



HOUSE-PLANTS AND CHILDREN.

MR. VICK:—Don't you suppose that the old Roman matron who called her sons her jewels, had flowers as well as children? I am sure she had. How could she have been a good mother, training her children properly, without them? No one will take me to task for this notion, for all the good mothers that read VICK'S MAGAZINE like flowers, and will see the sense of it.

Not long ago a nice old maid came a long distance to visit me. I marshaled before her a troop of seven, besides the little baby in my lap and an older one in its crib. "Nine children!" she cried.

My old canary seemed to like or to dislike Cousin Fanny's tones, for he at once set up such a noise in reply as to call attention to him and his family, and the old lady continued, "and seven birds!"

The children were grouped rather awkwardly near the lounge, but I was not ashamed of them, even with Mary's kitchen apron, John's torn hat, Charley's bare, brown legs, and Milly's headless doll. When those who wished had gone to their work and play, and the rest were gathered close about mamma's chair, my visitor said again, "Nine children, seven birds, melodeon, sewing-machine, no servant, and lots of flowers and pictures! I don't see how you live! I should think you would go crazy or die!"

Being what is called "easy," I could smile at this. Here old Bob began to sing, and, knowing from experience that I could not be heard at the same time with him, I motioned to Kate to carry him from the room, and just at that moment there was a sudden puff from the soft-coal stove and soot and smoke flew into the air in all directions. (I am a thin, chilly person, and had a fire even in June, because the morning had been

damp). "Phew!" exclaimed my startled visitor, but I only blew the soot to prevent its settling on baby's head and dress. Then I said it was easy to tell how we lived. "My personal burthen is no greater, probably, than that of each member of the family. We try to make the best of things. We usually do not have so many birds. In summer, to save some dust, we do without carpets and curtains; the walls are lime-washed, not papered; we avoid dry grass bouquets and light ornaments, and the picture frames are solid and smooth. If the children make work, they also help to do the work. Part of them go to school, and during school hours I have no worry nor care of them. The older girls are trusty and gentle to their brothers and sisters, and that is an unspeakable comfort to their mother. In winter there is always a room with a fire where the little ones may play, and then, also, there are carpets to deaden noise and keep feet warm. The melodeon and sewing-machine are noisy, I know, but it is at stated hours so that at other times we have peace. I must have flowers, but those I keep in-doors are mostly a kind with firm, smooth leaves, that I can keep clean by sponging such as Ivy, Calla, Wax Plant, Lemon and Oleander."

"Oleander! mercy! Do you keep an Oleander with all these little children around? Have you not seen in all the papers that it is poison, like the Mountain Laurel, that kills sheep and cattle? A skewer of its wood in their roast poisoned half a dinner-party, eating the flowers kills a person, and a mouthful of the leaves killed a horse. I gave away my white Oleander months ago, although I live alone, and Mrs. Wright planted out hers—it was a beautiful large tree—in the cemetery. Your having kept the plant safely for years is no evidence that one of

your family may not find it fatal to-morrow."

"Aunty," I answered with obstinacy and warmth, "my children don't meddle with my flowers, and I am not going to condemn a life-long favorite until I have to do it. Every paper copies those three stories, but if they are true why can't we have something fresh? My father once nearly killed a healthy, valuable horse by giving her a handful of green Corn leaves when she was hot and tired, she being used only to hay and grain. In not two days, but two minutes she had a colic. Still, Corn leaves are not poisonous. I have consulted my old botany, and find the Laurels called Heathworts, and so are Huckleberries and Rhododendrons, but the Oleander, as also the Periwinkle, is a Dogbane, and is mentioned with the Upas tree; but the Upas was fabled."

"My dear girl, don't go to your old botany, but to your dictionary and encyclopedia. You will find that the names Oleander and Rhodora have a common meaning if the plants have not a common nature, and I think you will find the same stories there that are in the newspapers."

Then, after reminding her how a plant had lately been pronounced non-poisonous by a scientific authority, although held always to be dangerous, I admitted that the encyclopedia ought to be good authority, and that, if what it asserted were true, I should feel that I must put my plants, not in the graveyard, as she advised, but in the stove.

I think my window pets have been painted by Cousin Fanny just a little blacker than nature meant them to be, and that if kept as flowering-plants they are not dangerous; as for that matter, who doubts that poison may be obtained from the Petunia, Datura, Digitalis, Poppy, Jerusalem Cherry, and many other favorite house and garden plants?—S. C. T., *Grinnell, Iowa.*

PETUNIAS AND PORTULACAS.—I wish you could have heard the many exclamations in praise of my Petunias. They were so large, and varied in color, there seemed no two alike, and they were fringed, mottled and striped, while others were of many different shades of color all combined. The Portulacas are dazzling and as large as some Roses.—MRS. W. C. R., *Freehold, N. J.*

THE FOUR O'CLOCK.

The *Mirabilis Jalapa*, or, as it is more commonly called, Marvel of Peru, is a half-hardy perennial plant of erect habit, with glossy, bright, ovate leaves, more or less cordate, producing its delightfully fragrant flowers in terminal fascicles in the greatest profusion from July until frost. It belongs to the natural order Nyctaginaceæ, and is a native of the West Indies, whence it was introduced as long ago as 1596.

The *Mirabilis* is a plant eminently adapted for general cultivation, on account of the ease with which it is cultivated, its profuseness of bloom, and its freedom from in-



sects. It forms a plant growing from two to three feet high, of branching habit, the color of the flowers being red, white, yellow, and some are marked with all conceivable shades and variations of these colors. As the flowers generally open in the afternoon the name, Four O'clock, is often applied to it. The term *Mirabilis* is a Latin word, signifying something wonderful or admirable, and is applied to this plant on account of the delicious fragrance of its flowers.

Like most plants in cultivation, the *Mirabilis* well repays by increased growth and profusion of bloom all the extra care and attention bestowed upon it. It will thrive and flower freely in any garden soil, but, in order to obtain the very best results, give it a rich, mellow bed; thus treated the *Mirabilis* will prove very satisfactory. This plant can readily be increased by seeds, which are very abundantly produced; the seed can be sown in a pan of light, sandy soil in a hot-bed or greenhouse about the first week in April, or in a cold-frame about the middle of April, or in a nicely prepared border, or where the plants are to stand, about the tenth of May. If sown under glass, transplant into three-inch pots as soon as the plants are strong enough to handle; take

care that the plants do not become drawn, gradually harden off, and plant out when all danger of frost is over. If sown in the open air it is much later when the plants come into bloom. As soon as the frost has destroyed the foliage, take up the large fusiform roots carefully and without injuring them, and preserve them in a manner similar to those of Dahlias. The next season, about the first of May, plant them out in a well-prepared bed and they will soon produce an immense quantity of bloom. Young plants are small in all respects as compared with these. As the *Mirabilis* is so easily obtained from seed, the roots are seldom preserved, but I would advise all who desire to cultivate the plant to perfection to do so. I am certain that they will be well repaid for it.

—CHAS. E. PARNELL, *Queens, L. I.*

SINGLE AND DOUBLE FLOWERS.

It becomes my duty to speak a word in defense of the "gawky single flower" so vilified by some one, as quoted in the *MAGAZINE* for September. The "gawky flower," like many another gawky, seems to be an unappreciated, much abused subject. Single flowers may be admirable by way of variety, even though they possess no intrinsic beauty. But the latter cannot well be denied them. Now, I make no professions to highly cultivated taste, and I do not look upon flowers solely with the eye of the botanist, who pronounces a double flower a monstrosity; nor do I consider the "present fashion" responsible for my preferences in this respect. But I am a lover of flowers, and a sincere admirer of the various forms and colors which they assume, and I confess to a preference for single flowers of many kinds. The Tulip, for instance, is a more beautiful object to me in its single than its double state. The latter is very showy and attractive; but the former, especially in rich colors, in form and shading of petals, is pleasanter to the eye than the ruffled and ragged appearance of the double. I beg pardon for calling names, though "ragged" is not much worse than "gawky."

Roses are usually more beautiful the more double and highly cultivated they become; but then the Rose has been the queen of flowers from time immemorial, and it is not pleasant to see royalty going

to seed. The Hollyhock, though a very plebeian flower, assumes sometimes the appearance of royalty by becoming many doubled, and though it cannot be made a Rose, yet it may become a respectable denizen of the flower garden.

Bell-shaped flowers generally are best left to their single state. Would not the Lily of the Valley lose much of its delicate beauty and become expressionless and unattractive by doubling? The Foxglove and Gladiolus are admired for the shadings and markings of petals, which double flowers do not display to advantage. The Calla we prize for its stately grace and the virgin purity of its single envelope. Who would care to see her fair white throat choked with ruffles? Another single flower to which I must pay court is the single, white Oleander. In its way it is not behind its double pink and white sisters in attractiveness. It excels them in the profusion of flowers it produces, and the waxy white blossoms are very fine for decorative purposes. I remember a church festival not many moons ago, where the flowers of the single white Oleander made beautiful a cross of green.

On a certain breakfast-table, this morning, stood a small glass containing half a dozen Morning Glories—blue, purple, crimson, and white—and as I noted their colors and markings, the question came to me, "How would a double Morning Glory look?" Banish the thought! They are too nearly perfect already for any such improvement. This is the case with many other flowers. The single furnish more attractions, present more of beauty to the artistic eye, than the double form.

—N.

THE GARDEN, FIELD, AND WOOD.

DEAR EDITOR:—Many a time in the last twelve years, during which my modest order for seeds has been annually sent and faithfully returned, I have thought of writing and describing their blooms, but have been restrained by the thought that I could tell nothing about them not already known. It certainly would be no information to say that the Phlox were of the brightest and loveliest colors; that the Verbenas were one blaze of glory; that the Petunias struggled to see which could hold up the loveliest cup; that the

Datura hedge challenged the admiration of every passer-by, and that even the Poppies in the children's garden were eulogized until they tossed their heads in disdain of meaner beauties.

But, soft, it was a desire to amuse those same children that led me to commit a mishap over which I daily groan. Last spring I thought it just the thing to have some of those lovely-colored mimic Gourds, the very pictures of which have been so admired by them. So, one soft spring day, I pressed the seeds into the ground in a very conspicuous place, and, after gravely informing the adjoining neighbor that soon that fence would be a bower of beauty, I retired. They grew; in fact they are now growing, and the uninitiated would imagine that fence the roosting place of all the Pumpkins in a farmer's cornfield. And the fruit

"Black spirits and white,
Blue spirits and grey,"

and of more forms than the heart of man ever conceived. I steal out at times to watch some new aggression, but that neighbor is vigilant, and never omits praising that "delicate vine," while grave-visaged men pause on their way to ask what the name of that rare flower may be. Please tell the Nebraska lady who wants a hedge covered, to drop a Gourd seed somewhere near, and in a few weeks a Coroner's jury would be able to sit on that hedge and never find it.

I wish to tell you how pleased I am that your perceptions of beauty are not confined to the flower-garden, but that you have many a good word for denizens of field and wood. Among my earliest remembrances is that of going to the meadows with a little brother, and bringing some Hepaticas to the old homestead, where they bloomed for years, to our great satisfaction.

To the young all over our land I will say that no study will give greater pleasure than botany. I long since made the acquaintance of every plant usually found in this latitude, and happy is the day in which I discover a novelty. When I am rich I shall travel through the West and the South to study their flora, but pending that favored time I want to beg every reader of the *MAGAZINE* who wishes a plant named to send me a specimen for identification. Seeds are preferable when they can be obtained, and all such will be

duly marked and returns given.—S. M. GRIFFIN, M. D., *Danbury, Conn.*

GARDEN NOTES.

Among horticultural prejudices, which free discussion and a universal reading of papers and questioning of their contents have pretty well extirpated, are the necessity for deep trenching, as for Asparagus, &c.; the supposed benefit of inverting the soil; the use of porous plant-pots only, and the airing of plant-houses and pits. The plant-growers of the period seem to have found out that the many openings for ventilation once thought necessary are superfluous, and the newest English houses for practical market-gardeners' use have no side ventilation at all, the door and the one side of the ridge of the roof being the only openings. They imitate, too, the American economy of having the building sunken in the ground wherever sufficient drainage can be had, and the convenience of a level entrance from the outside secured. All these new measures greatly reduce the cost and trouble of production. Sashes and frames being disused, scarcely half as much wood is used as formerly. The panes, a foot wide, are laid on rafters five by two inches, which are stayed by neat iron ties. With thoroughly seasoned wood and good paint, the durability is great, while much more light is admitted. As to the ventilation, the sending of leafy plants at rest, quite safely, half way round the earth, in cases sealed hermetically, proves that change of air is not continually necessary; and its chief uses seem to be the reduction of excessive heat under glass, and the strengthening of the plants by a little shaking up, which consolidates their tissues much as it strengthens the muscles and increases the spirit of a human creature, who might otherwise become a poor dawdling mope, devoid of back-bone or spirit.

While talking with a lady visitor to our fruit garden, she all at once broke out in admiration of a luxuriant vine covering its trellis with all shoots erect, and displaying a gradation of foliage certainly very beautiful, the mid-leaves of the growth immense in size, thick, and densely green. "And that is the vine which I thought was dead when I saw it lying flat upon the ground when the snow melted

away in the spring!" The remark reminded me of a story in one of my first reading books, which I have since learned was originally by a French author, an early writer of excellent books for children. A little boy went with his father to see his country house in March. The boy found great fault with the ragged and dead-looking disfigurement covering the bower in the garden. In July the family went to the country, and the boy, seeing the bower covered with beautiful foliage, began to thank and praise his papa for having listened to him and changed those dead and dismal old sticks for so delightful a vine. Of course the father showed that all this beauty came from the same despised trunk, which was, in reality, a Grapevine, and took occasion to point out the moral truth that things are not always what they seem on first view.

Children are very susceptible to the feelings of wonder and admiration which the varied developments of plant-life naturally inspire. To say nothing of the endless diversities of leaves, any single one will afford subjects of interesting talk and examination for a week. Besides a comparison of their various features, their surfaces, edges, venation, stems, petioles, &c., and the wonders of their construction and adaptations as seen through a magnifier, there is a quasi moral behaviour of great interest. No one leaf stands willingly in the way of another. All do their best to turn their green surfaces to the light, but each lets each have its unshaded share of sunshine. These characteristics of nature's tenderest work exhibited everywhere, as if pressed upon our attention, are far above books or precepts in good influence upon the mind of a child who is led to occupy itself with observations and conversation in this boundless field.—W., *Tyrone, Pa.*

COAL-OIL AND SCALE INSECT.—I have just tried kerosene oil for scale-insect on an English Ivy badly infested. Two tablespoonfuls of oil mixed with a cupful of milk was diluted with two gallons of water. The stem and leaves of the plant were immersed in the liquid for an hour or more, and then drained off. Afterwards the plant was washed with clean water, and entirely freed from the pest. The plant measures, with its branches, at least fifty feet.—MRS. E. C., *Rochester.*



GOLDEN ROD.

Dear shadowed sunshine!
Golden-crowned and fair,
By dusty roadside,
Or in shaded lanes,
You lift your blossoms everywhere.

Who does not love you,
Graceful, golden spear?
Like sunshine shadowed
By a passing cloud—
Who would not miss your presence here?

You ask so little,
And repay so much!
Give ever of your
Best, whate'er your place—
In life how many lives are such?

The purple Aster
Follows where you lead.
Perhaps she knows her
Dainty dress is just
The color that your blossoms need,

To show their beauty
Clearer. As the gold
Of stars gleams brighter,
When across the heav'n
Dark azure curtains are unrolled.

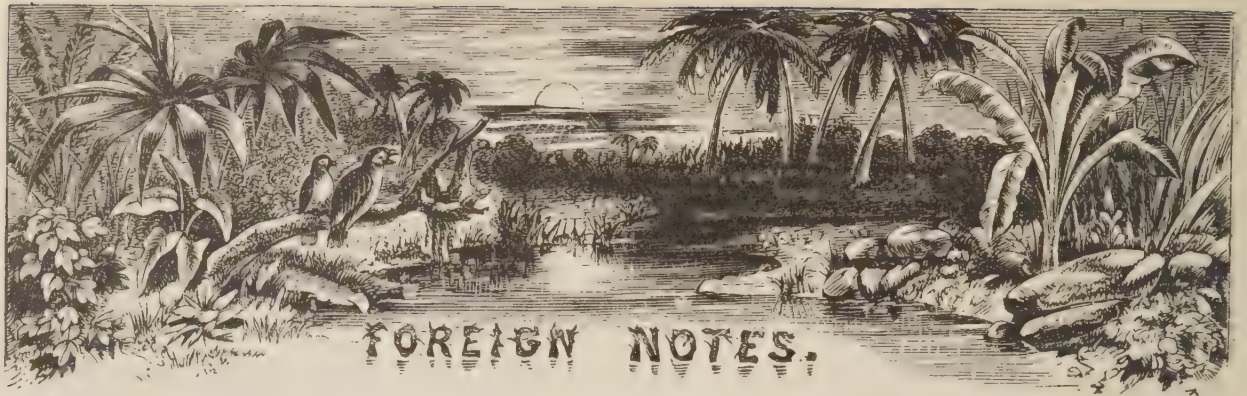
—MRS. A. C. A., *Hudson, N. H.*

RAIN AFTER A DROUGHT.

Oh! the welcome, welcome rain,
Starting little brooks again
Through the meadows, where the grass
Gladly greets them as they pass;
Bringing cool, refreshing breeze,
Flinging o'er the dust-brown trees
Drops that, when the boughs are stirred
Lightly by some little bird,
Fall in gems upon the ground,
With a pleasant, patt'ring sound.

Oh! the welcome, welcome rain,
Making bright the golden grain,
Once more filling wayside well,
Wooing with a magic spell
Springs from rugged rocks to burst,
Saying, "Wand'rer quench thy thirst;"
Bearing health and happiness,
Thoughts to cheer and dreams to bless
To the weary couch of pain,
Oh! the welcome, welcome rain.

—MADGE ELLIOTT.



BOUVARDIAS.

Gardening Illustrated says: "One London grower annually sells wholesale between 20,000 and 30,000 plants of *Bouvardia jasminiflora* and a scarlet kind in five-inch and six-inch pots." Some very good notes and hints in regard to the management of plants are given. "Visitors to Covent Garden Market during the summer-time must have remarked the difference that exists between Bouvardias offered for sale and those with which one generally meets in private gardens. The country growers, as a rule, use the knife much too sparingly in the case of Bouvardias, and, therefore, instead of handsome, bushy plants one foot or so high and as much through, clothed with healthy foliage to the pot, as may generally be seen in Covent Garden, we find long; spindly shoots furnished with brown-looking foliage, and bearing at the points a single truss of starved-looking flowers. The more that bloom is cut from Bouvardias the more profusely do they flower, and, of course, they become more bushy. During the winter months a somewhat brisk temperature is necessary for Bouvardias grown to supply cut bloom, removing them as soon as the flowers begin to expand into a cooler temperature, in order to harden the blossoms a little before they are cut. After the blooms have been cut, the plants are again placed in a warm, moist temperature, in order to promote new growth and another crop of bloom. In summer, when cut flowers begin to get cheap, these Bouvardias are allowed to come fully into flower, and are sold in the market in the form of plants.

"During the summer, Bouvardias are grown in cool houses or cold-pits, and sometimes in temporary frames, but in autumn, winter, and spring a temperature of about 55° is maintained, except in very

severe weather, when a few degrees lower will not injure them. Some have lately taken to plant out their Bouvardias in the open air, and lift them in the autumn. For this purpose cuttings are struck in autumn or early in spring, and stopped in the same way as just mentioned; after being hardened off, they are planted in June in beds, or in shallow trenches of rich soil, the surface of which is mulched with manure; abundance of water is given to the roots, and early in September, when the plants show bloom, they are carefully lifted with as much ball attached to them as possible, potted, and afterwards put into a shady place; they are well watered overhead and at the roots, and when fully established are placed in houses or pits to come into bloom. Red-spider and green-fly sometimes attack the foliage, but frequent fumigations, syringings, and liberal culture soon counteract this evil, and little damage is done."

MIGNONETTE AND BEES.

A writer in *The Garden* says: "One is really surprised to find in large gardens scarcely a plant of Mignonette, and yet a good breadth should be sown every spring. Of all colorless flowers none are more frequented by bees, and the value of a large breadth for money-making purposes cannot be over estimated. Sir JOHN LUBBOCK spoke at York of the fondness of bees for blue colors. Now, although I have close to me big patches of Mignonette, and both pale and dark blue Pansies in full bloom, and the richer blue Salvias, the bees don't frequent the masses of blue, but hie to the colorless Mignonette. Indeed, if the love of bees for richly-colored flowers were as common as is believed, we ought to have these hues most abundant in nature; whereas they are not only the least com-

mon, but inconspicuous flowers predominate."

In a former volume (Vol. 2, page 98,) we gave considerable attention to this subject, and all who may be interested in it are referred to that article. It was there shown that white and inconspicuous flowers far exceed in number and value colored flowers for the use of the bees.

STIPA PENNATA.

At the late meeting of the British Association Sir JOHN LUBBOCK read a paper on "The Mode in which the seed of *Stipa* buries itself in the Ground." An account of it is given by the *Gardiners' Chronicle*, from which this extract is made.

"The actual seed was small, with a sharp point, and with stiff, short hairs, pointing backwards. The upper end of the seed was continued into a fine twisted rod; then came a plain cylindrical portion attached at an angle to the corkscrew, and ending in a long and beautiful feather—the whole being about one foot in length. That end was supposed by Mr. FRANCIS DARWIN, to whom they were indebted for a very interesting memoir on the subject, to act very much in the same manner as that of *Erodium*. He did not doubt that the end would bury itself in the manner described by Mr. DARWIN, but he doubted whether it always did so. One fine day, not long ago, he chanced to be looking at a plant of that species, and around it were several seeds more or less buried in the earth. There was a little wind blowing at the time, and it struck him that the long-feathering awn was admirably adapted to catch the wind, while on the other hand it seemed almost too delicate to drive the seed into the ground in the manner described by DARWIN. He therefore took a seed and placed it upright on the turf. The day was perfectly fine, and there could therefore be no question of hygroscopic action. Nevertheless, on returning in a few hours, he found that the seed had buried itself some little distance in the



SEED OF STIPA
PENNATA.

ground. He repeated the operation several times, always with the same result, thus convincing himself that one method, at any rate, by which seeds bury themselves is by taking advantage of the wind, and that the twisted position of the awn, by its corkscrew-like movement, facilitates the entry of the seed into the ground."

A BOTANICAL PIE.

A society of archeologists in England recently held a meeting at a village in Shropshire, called Church Stretton. In an account of the meeting the writer says: "Whilst speaking of dinners and dining, it may as well be recorded here that at one of the first Church Stretton dinners a large fruit pie was produced. 'What is it made of?' asked a visitor. 'Blaeberries, sir,' said the first waiter. 'Blueberries,' said the second. 'Whinberries,' said the pretty running-maid. 'Bilberries,' said Professor BABINGTON. 'Whortleberries,' said another botanist. Here the first waiter in despair came to the writer and said, 'Sir, they say you are a good herbalist; what is the correct name of these berries?' 'Vaccinium myrtillus,' was the answer. During the rest of the week the terrible waiter persisted in calling Bilberry tart, 'Vaccination murderers.'"

ZINNIAS.

The Garden says: "The Zinnia has never had a place in proportion to its importance. People do not notice sufficiently the strange value of the distinct and lovely colors which these plants show. If we mistake not, their day will come, and both the single and double sorts will receive the good culture they deserve. The double forms well-grown in some Continental gardens, that is to say, planted singly and well, like a Dahlia, are superb."

THE EDELWEISS IN THE GARDEN.—At Newcastle-on-Tyne the Edelweiss has survived two winters on the old Roman wall, on an exposed rockery quite three hundred feet above the sea level. When the snow melted there was no trace of the plant, but as spring advanced it appeared, and is now in vigorous health, and has borne eight flowers the past summer.



AMERICAN POMOLOGY.

The meeting of the American Pomological Society at Boston in September was one of great interest and value. The Society was entertained by the Massachusetts Horticultural Society, of which the Pomological Society is an offspring, and the union at this time was particularly enjoyable. On one evening during the session a banquet was given to the members by the Massachusetts Horticultural Society, in Music Hall. Space will not admit of a full description of the floral display on the occasion, but we may merely notice that the choicest plants and flowers on exhibition by the Horticultural Society were employed on this occasion, and Music Hall, according to the *Boston Journal*, "looked even more inviting than during the exhibition just held, as the plants and flowers which had formed the central charm were transformed into the foreground and background of the enticing scene at the tables. Nine long tables occupied the floor in parallel lines, and two others of crescent shape adorned the platform. Near the base of the Beethoven statue were richly-foliaged Begonias and rows of tropical plants, with tall Palms leaning on either side. The semi-circular border of the platform was fringed with delicate Maiden-hair and other varieties of Ferns, and also Dracænas and plants of equally beautiful foliage, interspersed with Agaves, Cacti and Caladiums. The central beauty of this line, however, was in the magnificent *Alocassia Metallica* that stood in front of the President's seat. Suspended from the balconies were rustic baskets filled with Begonias and Coleus. The tables were plentifully supplied with bouquets of the most seasonable flowers, Dahlias, Asters, Gladioli, and, curving over each, beautiful strips of Ribbon-grass and tropical foliage. In the front balcony,

over the clock, was a fine Palm tree environed by Dracænas and luxuriant exotics. Ranged along the sides of the hall were pretty varieties of hot-house plants, forming a sort of trimming for the floral picture.

"While the guests were assembling and during the banquet, spirited music was contributed by W. J. D. LEAVITT, presiding at the organ, and the German Orchestra, stationed in the balcony."

After an hour spent at the tables, the Hon. FRANCIS B. HAYES, President of the Horticultural Society, greeted the assemblage in an appropriate speech, which was responded to by MARSHALL P. WILDER. After this, other speeches and toasts followed, together with the singing of the following hymn, written for the occasion by JOHN G. WHITTIER:

O Painter of the fruits and flowers,
We own Thy wise design,
Whereby these human hands of ours
May share the work of Thine!

Apart from thee we plant in vain
The root and sow the seed;
Thy early and Thy later rain,
Thy sun and dew we need.

Our toil is sweet with thankfulness,
Our burden is our boon;
The curse of earth's gray morning is
The blessing of its noon.

Why search the wide world everywhere
For Eden's unknown ground?—
That garden of the primal pair
May nevermore be found.

But, blest by Thee, our patient toil
May right the ancient wrong,
And give to every clime and soil
The beauty lost so long.

Our homestead flowers and fruited trees
May Eden's orchard shame;
We taste the tempting sweets of these
Like Eve, without her blame.

And, North and South and East and West
The pride of every zone,
The fairest, rarest and the best
May all be made our own.

Its earliest shrines the young world sought
 In hill-groves and in bowers,
 The fittest offerings thither brought
 Were Thine own fruits and flowers.

And still with reverent hands we cull
 Thy gifts each year renewed;
 The good is always beautiful,
 The beautiful is good.

Various local pomological and horticultural societies were then represented by a few remarks from delegates, and the company separated after appropriately giving expression to their patriotism by singing America.

A few extracts are here given from the speech of the President at the convening of the Society:

"When I reflect on by-gone days, and bring to mind the many old and zealous co-workers who have gone to their rest, and know before long I shall join them on the other side of the river, I am inclined to seek for rest also. But when I look around me and see so many who have labored with me from the establishment of the Society, and are here to-day, and so many others from all parts of our continent who have come to aid in the prosecution of our good work, I am inspired with the zeal and interest of those halcyon days when life was young and hopes were bright. O, yes,

I feel the bliss of younger days,
 Bright as the beams of morning rays;
 With greetings warm and glad some smile
 My care-worn soul they cheer awhile,
 And fill with hope, as though in truth,
 I breathed new life, a second youth.

"Happy, most happy am I again to join hands with some who aided in the establishment of our institution; who rocked the cradle of its infancy, and still survive to rejoice in its progress and usefulness. Thanks to the Giver of all good, Charles Downing, Thomas, Ellwanger, Barry, Hovey, Manning, Warder, James, Mead, and the brothers Parsons still live!

"Thanks, that we are here once more in old Boston, from which primarily emanated so much of the interest of Pomology that now pervades our whole country—here again engaged in efforts to promote the objects of our institution, and to disseminate its blessings throughout our widely extended territory. I cannot find words to express the gratitude I feel that my life has been prolonged to the present moment, and that you have come once more, during my life, to my own home,

where, after many years of absence, I may renew the bonds of affection and regard with my old co-laborers, and unite with those of fewer years in advancing the science of American Pomology.

"Few are aware of the great benefits which have resulted from the free discussions of the merits of the many new varieties of fruits which are continually being brought to notice, recommending only those of promise, and discarding hundreds of kinds which would otherwise be imposed on the public as valuable sorts. Formerly it took many years to test the merits and adaptation of fruits to our several locations; now, when a new variety is promulgated, it must receive the commendation of our Society for trial before it can have an extensive sale, thus recording its relative value and adaptation, saving immense expense and delay. Our catalogue there presents from time to time the results of accumulative experience, and furnishes a text-book and guide for every section of our land. The duty of the committee is indeed arduous and responsible, but this is gratefully acknowledged, especially that of Mr. BARRY, and if he were to have no other reward, our catalogue will be a lasting monument to his memory.

"No other fruit, unless it be the Strawberry, now attracting so much attention, and perhaps no other, if we except the Apple, is of more importance as a source of revenue, or an article of luxury for our tables than the Grape. No other country possesses such a vast extent of territory or possibilities for its successful culture, and in no other section of the globe is there, at the present time, such encouragement thereto. In fact, it seems as though Providence had designed many parts of our continent especially for its cultivation. The Scandinavians, as the Sagas have it, eight hundred years ago, here found the vine growing so abundantly that they gave to our coast the name of Vinland. CHAMPLAIN, in his voyages on our coast about five hundred years afterwards, saw vines in abundance. The pilgrim fathers, at Plymouth, found Grapes 'white and red, and very strong,' and should the phylloxera continue its devastation in the vineyards of the old world, our country may become the most favored vineland of the world.

"With every succeeding year new and

valuable varieties are coming to our notice, either adapted to special locations or purposes, or for general cultivation. Nor is it too much to hope that ere the close of this century, with our present zeal and skill, we shall produce varieties that will rival the choicest kinds of the 'most favored climes. Even now we have those which compare favorably with our foreign varieties, and we believe the time is not distant when the aroma of our native sorts, now so much despised by some, will become, when chastened down as it has been in the Brighton, Duchess, Rochester, and Monroe, one of the excellent characteristics of our American Grapes.

"How potent the influences of this art! Little did Mr. BULL think what a blessing he was conferring on the world when he sowed the seed which produced the Concord Grape,—the mother of so many improved varieties. See the number of white varieties (not to speak of others) which have been produced mostly from this: the Martha, Lady, Pocklington, Lady Washington, Hayes, Ann Arbor, Prentiss, Duchess, and still another soon to be within our reach, which is heralded like Niagara herself as one of the wonders of the world.

"The illustrations of this improvement are manifested in the numerous seedlings obtained by crosses on the Concord, some of which are of a remarkable character, possessing great size and beauty, and whose vigor and productiveness are declared to be even greater than that of their mother. We see this improvement also in the crosses of a wild Grape with the foreign species by ROGERS, as shown by the amelioration of the native aroma in the Barry, Wilder, and Lindley, the last named, like the Jefferson of RICKETTS, possessing a peculiar rich flavor which might, with propriety, be denominated and may yet be distinguished as the Muscat of America. Nor do I doubt that we shall in time produce varieties which will compare favorably with, and perhaps be equal in size, beauty, and excellence to the Cannon Hall, or other Muscat, now so highly praised for their peculiar aroma. The Pocklington, in size and beauty, is an approach to this. Nor is it unreasonable to suppose but we may have a Grape, if we have it not now in the Duchess, that is as well adapted to exportation as the white Malaga, and of a much better quality."

VERANDA FLOWER-GARDEN.

MR. JAMES VICK:—Seeing many through your MAGAZINE asking advice, I thought I would come, too, with my trouble. I have a fair-sized double, scarlet Geranium which has had but two flower-stems on it this summer, and I have taken the best care of it I knew. The plant is over a year old and seems quite healthy, having two straight stalks seventeen and a half inches high. Now I would like to know what soil is best adapted to Geraniums, as we have a plant with salmon-colored flowers which has only bloomed twice, and I suppose most Geraniums to be constant bloomers. I have kept the plants in pots, on the east porch of the house. Do you think it best to repot them more than once a year? Many annuals do not do well here; the Zinnia, Mirabilis, and Balsam I find are the best.

My Zinnias are looking very bright since the rain, for we have had it very dry here, as it has been elsewhere.

The Alyssum you sent me did well and is blooming now, but the Eutoca did not. I expect our soil is too stiff for it, it being mostly clay.

The flowers sent are for naming. They grew in the field. The one resembling a Pea bloom is very common, and flowers in July and August, and is about a foot in height. I found but one plant of the other, and the flowers were a bright blue when fresh; it grows some two or three feet in height, and is blooming now.—MRS. I. M. C., *Rome, Ga.*



A WELL-TRAINED GERANIUM.

A successful plant-grower must be informed to some extent in regard to suitable soils for their growth; equally important is it to know how to direct the form and regulate the shape of plants. One possessing a good soil naturally well adapted to plants, and in a climate favorable to them, and who, only aiming to have a garden during the fine season, raises his specimens either from seed or from young plants bedded out, may have what to him are satisfactory results without any special attention either to the soil or to the plants; there are such places. But flower-gardening in pots on a veranda, as is the custom in most parts of the south, is something quite different. In regard to soils and training of plants, our pages are seldom silent, and at this time

it is only necessary to say that decayed vegetable matter, such as is produced by the decay of refuse plants and leaves that one always has to dispose of, is a valuable ingredient of a good potting soil. All refuse vegetable matter collected about a garden may be placed in a pile spring and fall, and the next fall it will be fine and mellow. A similar substance, commonly known as leaf-mold, may be procured from the woods or forests where it has formed on the surface of the ground by the rotting of the fallen leaves. Next, what is called loam is needed, and by that term may be understood any good garden or field soil containing more or less clay. The best quality of loam may be had by cutting sod from old pasture ground and, piling it up grass side down, leaving it six months exposed to the weather to decay. A little pains taken spring and fall will keep a supply of the two substances mentioned.

Now, an equal mixture of the mold and the loam and some sharp sand will make a good, light soil; more loam and less mold and sand will make a heavier soil, and an addition of more or less old manure will make mixtures of different degrees of richness or fertility. Thus, it will be seen, the soil one uses may be perfectly under control.

Geraniums like a strong, rich soil; one part of mold, one of sand, one of manure, and two of loam, all well mixed, will make a substance that these plants will delight in.

The proper training of plants cannot be neglected. A well-grown Geranium must be compact, bushy, and with numerous short-jointed branches. This form can be secured by stopping the growth frequently during its early stages, thus causing the latent buds to develop and form branches. Year by year the process can be continued until a large branching plant is formed, as shown by the illustration. How different in contrast is such a plant with one allowed to grow to one or two tall, straight stems!

If the soil of the flower-bed is too stiff, it may easily be improved by adding some sand and some manure to it—not a great work to put it in proper condition, since the space is small.

The plant with the Pea-shaped flower is Goat's Rue, *Tephrosia Virginiana*, and that bearing blue flowers, *Salvia azurea*.

BUSH MORNING GLORY.

MR. VICK:—I enclose a few seeds and a pressed flower of a wild plant I found on the prairie near my home. I do not know what it is; some call it Wild Morning Glory. The flower looks very much like a Morning Glory, so do the seed. It is not a vine, but a bush, not more than two or three feet high; the leaf is not more than half an inch wide and three or four inches long. The flower is a beautiful shade of deep, purplish-pink when fresh, and very delicate. If you think it worth naming and describing, please do so, as it may be pleasant for others to know about it. I suppose it grows in other places as well as here.—
MRS. H. S., *Denver, Colorado*.

The plant here described is what might be properly called the Bush Morning Glory. It is *Ipomœa leptophylla* of TORREY. GRAY's description of it is as follows: "Very glabrous; stems erect or ascending, (two to four feet high) and with recurving, slender branches; leaves linear (two to four inches long, two or three lines wide), short petioled, acute; peduncles short, one-half flowered; calyx three or four lines long; the sepals broadly ovate, very obtuse, outer ones shorter; corolla pink-purple, funnel-form, about three inches long; capsule ovate, an inch long; seeds rusty pubescent."

The statement is also made that the root is perennial, immense, weighing from ten to one hundred pounds, and that it is a striking and showy species, first collected in Long's expedition by Dr. E. JAMES, who singularly mistook it for an annual. Its locality is given as the plains of Nebraska and Wyoming to Texas and New Mexico. This would, of course, include Colorado, where the present specimen was found. This is, apparently, a very interesting plant, and we shall endeavor to raise and test it here.

THE RAMIE PLANT.—A New Orleans journal announces that machinery has been invented that will properly clean and prepare the fibre for market, and the southern people now confidently express the hope that they will soon astonish the world with another staple more durable, of finer texture, at less cost, and scarcely less abundant than cotton.

PEARS FOR THE SOUTH.—The *Southern Farmers' Monthly* recommends for Florida and Georgia the Bartlett, Le Conte, and Duchess Pears, and says that they "will grow and produce well in our southern climate, and produce as fine, marketable Pears as at the north, if not better."

NIGHT-BLOOMING JASMINE.

MR. VICK:—As a partial return for favors I shall be glad to send you a rooted slip of the Night-blooming Jasmine, a plant of which I fail to find any mention in your catalogue. The blossoms, which are nearly closed during the day, and absolutely inodorous, open about dusk and then fill the house with their fragrance, and the plant by its vigorous growth and beauty would prove a source of gratification to every owner of a window-garden. Its best blooming season is in the fall, although it sometimes blossoms in spring. It is quite possible that you may know the plant by some other name; if so, you will recognize the blossom which I send you in a little box by this mail. If placed at once in water, the blossoms will be fragrant when evening comes. Should it be new to you, please advise me, and your acceptance of a rooted slip with some cuttings will oblige me.—E. L. C., *Hannibal, Mo.*



CESTRUM AURANTIACUM.

The specimen received, and which our friend so kindly offers to put us in possession of, is that of *Cestrum Parqui*. It is mentioned in the *FLORAL GUIDE* of this year on page 63. The present illustration shows *Cestrum aurantiacum*. This species has brighter flowers than *C. Parqui*; they are of a clear orange-yellow, and are equally fragrant.

DUCHESS AND OTHER GRAPES.

MR. CHARLES DOWNING writes to the *Orange County Farmer* in relation to the Duchess Grape, stating that it was injured in some localities by the excessive cold of last winter. To prevent such injury he says: "It is only necessary upon the approach of winter to lay the vines upon the ground and put stakes and pieces of wood upon them sufficient to keep them close to the earth, protecting them from cutting winds." Furthermore, he continues, "I would advise every person, who has ground sufficient, to plant a vine or two each of the Duchess, Lady Washington, Jefferson, and Brighton, and

when old enough to bear good crops, they will not regret it, nor any longer want Hartford Prolific or Concord Grapes to eat."

This is an opinion from a high authority, and we are pleased to lay it before our readers. It corresponds with the opinion we have already formed of these varieties, though, with the exception of the Brighton, our opportunities for judging of them have not equaled those of Mr. D. We accept his judgment in this matter without qualification. Our readers will do well to follow the advice.

THE ROSE BUG.

A correspondent of the *Rural New Yorker* advises the use of hellebore and kerosene to destroy rose-bugs. A medium-sized watering-pot full of water has added to it four spoonfuls of hellebore and two spoonfuls of kerosene. The whole is frequently stirred while it is being applied. As soon as the insects appear the bushes are sprinkled. This remedy is reported as perfectly successful. The inquiry naturally arises whether it is the hellebore or the kerosene that is the effective agent of destruction, or if they are only powerful in combination. We should like to hear if any one has used coal-oil alone for this purpose, and with what result.

PRESERVING FRUIT.

California fruit-growers have made a discovery, it appears, in keeping fruit fresh for a long time. It is done merely by packing it in carbonized wheat bran. The discoverer of this method claims that by it Peaches, Grapes, and similar perishable fruits may be so well preserved as to be had in perfect condition in mid-winter. Another advantage is that fruits so packed may be shipped by slow freight and, consequently, at lower rates than by fast freight.

VENERABLE GARDENERS.—A lady of New Egypt, New Jersey, writes: "At sixty-three I am my own gardener, and my assistant is my mother, who is eighty-six. So you may perhaps think my efforts in floriculture must be rather feeble." Not at all, good friend, for you must have treasured up in those long years a world of valuable experience.

PEAR-TREE BLIGHT.

A condensed account has been given in the pages of this volume of the report of Prof. T. J. BURRILL of his experiments and observations in regard to the Pear blight, and the Yellows in Peaches. The following communication from him to the *Botanical Gazette*, confirming his statements by his observations of the present season, is particularly interesting:

"Please permit me to call the attention of your readers who are adepts in the use of the compound microscope, to the subject of disease in plants by bacteria. Last year accounts of my own investigations were published in the transactions of the American Association for the Advancement of Science, *Scientific American*, *American Agriculturist*, and elsewhere. These had special reference to the so-called "fire blight" of the Pear and "twig blight" of the Apple tree. Some much more limited studies upon the "yellows" of the Peach were also published in *Science*. The proofs offered in these accounts were such as: 1. The uniform presence of a certain species of Bacterium in the dying tissues. 2. The appearance of the disease upon inoculating healthy limbs with this Bacterium. 3. The observed multiplication of the organism and the gradual spread of the disease from the point of inoculation.

"The results fully convinced me that these diseases of our orchard trees are directly due to the operations of this minute cryptogamic plant, whatever may be the indirect surroundings and conditions rendering such operations possible. The experiments of last year have been repeated and verified during the present season (1881), and further research has shown that fruit trees are in no wise peculiar in this respect. Many other plants suffer in a similar manner from the same cause. Among trees, none are more certainly and surely destroyed in this way than the Lombardy Poplar, whose dead or dying spires so commonly attract the attention of the most casual observers throughout our land. *Populus tremuloides* dies still more apparently like the Pear tree. The Butternut and the Linden succumb to the same destroyer. Ash and Elm trees do not fully escape; the Maples, especially the sugar-tree, often similarly suffer. Shrubs and herbaceous plants are also injured or killed outright

by the avaricious, omniverous little creatures. The leaves of the white-flowered Lilac wither upon their stems before they have half-filled their proper duties, and those of the common Pæony die while the summer's sun invites them to fuller development and activity.

"In these and many other instances, the destroying agent is almost surely one and the same, though the appearance and even the characteristics differ very much in the resulting effect upon different subjects. The Pear tree more commonly becomes diseased throughout the entire stem and its appendages, while the young twigs of the Apple tree often alone perish, or a limited area of the bark on the trunk dies. In the Lilac it is the leaves which suffer, the branchlets bearing them continuing in perfect health. In the case of the Lombardy Poplar the small limbs perish only because the larger parts are destroyed. So far as I have observed, the leaves are not all infected. If the yellows of the Peach is really due to the same specific Bacterium, a still further difference is shown, for this tree does not die by inches, the disease beginning in some well-defined place, and gradually spreading, as in the other cases. The whole top languishes, and it has been supposed that the roots were also involved. My studies upon this disease have been confined to severed specimens sent to me through the mail, but in no instance have I found the pieces of roots taken from diseased trees infected with bacteria; the diseased limbs always are. In the Pear, Apple, Poplar, etc., the roots are never the seat of the disease, and become infected, if at all, only through the contagion from the trunk.

"Inoculations with fresh material (bacteria) are as certain to communicate the disease as are similar operations upon animals. Vaccination as it is practiced against small-pox is not successful in a greater number of instances than is this method of producing blight. In last year's experiments sixty-three per cent. of the total number of inoculations in Pear and Apple unmistakably communicated the disease. By operating on what became known as the most susceptible parts and kinds, a much greater per cent. succeeded, approaching near to one hundred. Similar punctures with a clean needle had no effect whatever. Applica-

tion to the outside of the unbroken epidermis was ineffectual. These results are corroborated by similar experiments this year, not, however, prosecuted to the same extent.

"There are to my mind many interesting questions left unsolved, but the main proposition is, it seems to me, as thoroughly demonstrated as any physiological or pathological matter can be. There are no speculations or unfounded theories admitted; experiments, observations and results. I should be pleased to know if others have tried such experiments."

DENUDING MOUNTAIN FORESTS.

A most interesting and valuable account is given in the *Popular Science Monthly* for October, by M. J. CLEVE, of the effects of removing the forests from some portions of the Alps. He shows that when the woods are destroyed violent torrents roll down the mountain side, carrying devastation and ruin in their course to an extent one who is not an eye witness can scarcely conceive. The facts here revealed teach a lesson to the people of this country, not only in relation to hilly and mountainous sections, but as regards all localities, for there is no question but the ratio of forest and cleared land in any section determines its agricultural capacity.

"Attention has long been given to devising means to limit the ravages of these torrents, which ruin the land, threaten estates, destroy roads, and sometimes even compromise the existence of villages. Walls have been built along the banks to protect them, or across the streams to allay the force of the waters. The most efficacious means, however, as yet discovered, has been to maintain the woods on the slopes of the mountain. The effect of cutting away the trees in promoting the formation of torrents has not been doubted by the inhabitants of mountainous regions, and is clearly set forth by M. SURRELL, who says: 'When we examine the tracts in the midst of which torrents of recent origin have been formed, we perceive that they have in all cases been despoiled of their trees and bushes. If, on the other hand, we examine hills whose sides have been recently stripped of wood, we observe that they are cut up by numerous torrents, which have evidently been formed very lately. Here is

a remarkable double fact: wherever there are recent torrents there are no longer forests, and wherever the ground is cleared these torrents are formed; and the same eyes that see the woods fall on the declivity of a mountain, may see appear there immediately a multitude of torrents.'

"The disastrous consequences of removing the woods from the Alps began to attract attention in the last century, and have since been discussed in many publications and official reports. In 1853 the Prefect of the Department of the Lower Alps said in a report to the Minister: 'If prompt and energetic measures are not taken, it will be almost possible to designate the precise moment when the French Alps will become a desert. The period from 1851 to 1853 will produce a new diminution in the number of the population. In 1862 the Minister will remark a continuous and progressive reduction in the number of hectares devoted to agriculture; each year will aggravate the evil, and in a half-century France will count more ruins and one department less.' The departments of the Upper and Lower Alps actually lost thirty thousand inhabitants, or one-ninth of their population, between 1851 and 1876. A law for recovering the mountains with wood, which had been prepared by M. Forcade de Rouguet, Director-general of the administration of the forests, was adopted by the legislative bodies in 1860, and was put in operation shortly afterward."

AN OPEN LETTER.

MR. VICK:—It is now nearly a year since I wrote you an "open letter," communicating my pleasure on having received a present of two bound volumes of your MAGAZINE, and at the same time stating my reasons for deeming them most fitting presents for the approaching holidays, since I knew of no other way of securing so much pleasure through so small an investment.

Though this is not at all what I proposed to write about, my pen has betrayed me into this channel, and so will add, that the above opinion has since been amply confirmed. And this is how it was. When, last summer, I came to pack my trunk for a long visit among various people, I packed those volumes (my own bound numbers for 1880 making

the third,) plump into the bottom, first thing. I cannot undertake to tell what a sensation they produced everywhere, for I must occupy the space required for that to say, what the right ones probably will not read except they see it in a borrowed number, and that is, that many women—who do not carry the purse—are in need of so many things for selves and families before the necessary money is at their disposal, that there is no dollar and a quarter left for the beautiful monthly, however much they may desire it. This is a prolific theme, but I must drop it right here, and content myself by adding only this, that one friend charged me that wherever I went I must take out those books early and pack them up late! And now here I am in the coziest of homes, with only a meadow and Otter Creek between me and the foot of majestic Green Mountains; and my pretty books are lying about the rooms, with many a daintily and a few ably written articles therein, while in the yard beneath my window are many well-kept plants and flowers in a wonderfully thriving condition. Near by, and among them, are a small Cut-leaf Birch, a Camperdown Elm, a very large Ricinus, and a Purple-fringe bush.

By taking a short drive, one may see the brilliant red clusters of the Mountain Ash along the way on either hand, decorating the yards of those who take the trouble to secure them at just the right season of the year, by transplanting from their mountain homes. They excel in beauty any ornamental tree I ever saw, at this season. In the fence corners the Bush Cranberry is bright with red clusters, and the highways are fringed all along with the pretty Brakes which, although not so delicate as our forest Ferns, are just fitted for the rugged life they live.

But the mountains, O, the mountains! The hills, streams and cottages of early childhood often seem, when visited in after years, to have dwindled; but these wonderful mountains never looked to me so large before. They loom up, immutable and everlasting, confronting us from every standpoint with their bold outlines; crowding together, overlapping each other, stepping out of the rank and forming a new line, and then towering up against the space left by the sloping sides of the fronting ones, and looking at us from over and between, as if to say, "See

how easy we can overlook these fellows!" Let no one who has climbed the Alps curl his lip at the supposed—or real—ignorance of an ardent admirer, worshiper almost, of the Green Mountains. It is disloyal to be unduly eager to laud everything foreign. Every land has its specialties, and these mountains have a beauty and charm peculiarly their own. The White Mountains have their claim—the Alleghanies theirs, while the great Niagara perpetually roars its immensity to the shores of two nations. But a Green Mountain torrent for me after all.—BUCK-EYE WOMAN, *Danby, Vt.*

OUR LATE PRESIDENT.

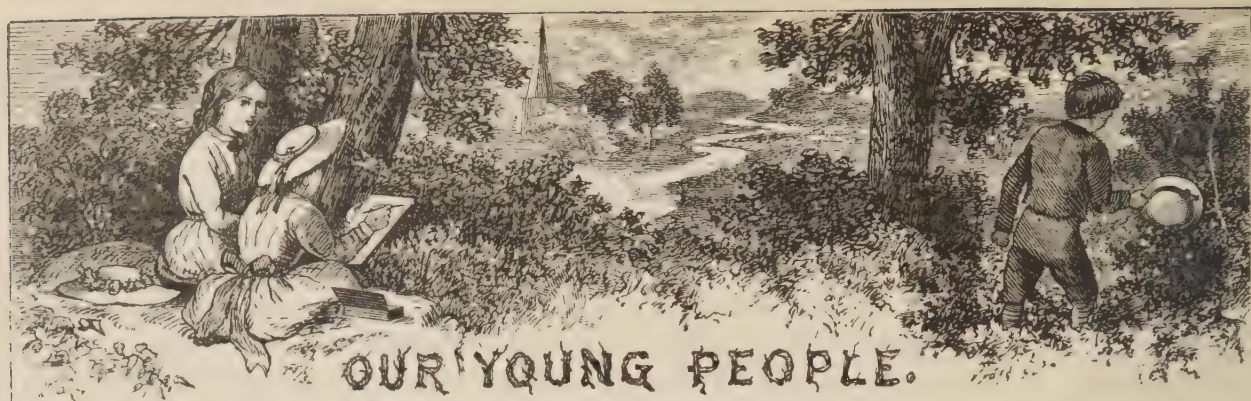
The sympathy felt and expressed in Europe for our late President during his sickness was as grateful as it was wonderful. Scores of times, both on the Continent and in England, we were addressed by perfect strangers, who knew us by appearance and language to be Americans—"I congratulate you, sir, on the favorable news from your President this morning," "We are elated at the late good news from your good President," &c. A private letter written us by one of the leading editors of London, dated September 26th, says: "This is the day of your President's funeral. I am urging the erection of a monument to his memory in England—if possible, in the Abbey."

PLANTS NOT BLOOMING.

Please state what is the matter with my Yucca and Pyrus Japonica. I have had them six years and they have never bloomed.—MRS. I. N., *Dale City, Iowa.*

The above complaint is similar to many others that reach us from prairie regions, and we have reason to conclude that in all these cases the cause of this condition is the abundant fertility of the soil; and this is compatible with the welfare and vigor of the plants, which in due time will yield their bloom in abundance. Digging around the plants and mixing sand with the soil for the roots to run in, may hasten the blooming.

CAT'S CRADLE.—We have received from the publisher, R. WORTHINGTON, of New York, an interesting book of rhymes and colored pictures for children with the above title. It is very handsome, and will please and benefit the little ones. Price, \$2.



IF THE WEATHER BE FAIR.

"If the weather be fair,
I, merry and free,
Will dance in the air,"
Said a butterfly gay.

"I," said the wise bee,
"I will work all the day
On bush and on tree,
If the weather be fair."

—TRANSLATED FROM THE FRENCH.

KATE'S BIRTHDAY SURPRISE.

Kate Burton came home one day looking quite forlorn, and threw herself on a lounge in a very despondent attitude.

Mrs. Burton had noticed several of these moods of late, and was beginning to understand them. So, for a time, she said nothing, but finally inquired of her daughter if she were sick.

"Yes, I am sick," she answered, "sick of these dowdy old rooms; we can never fix them up prettily, as other people do theirs. I just met Ida Middleton with her new shopping basket full of gay-colored worsteds and flosses, and a cartoon pattern of Little Bo-Peep, which she is going to embroider on a Holland towel with heavy, netted fringe; and I know it will be perfectly lovely. I am really ashamed for Ida to set foot in this house another time."

"Mrs. Middleton has been here this very afternoon," said Mrs. Burton, "and seemed to think our rooms cheerful looking and pleasant. She especially admired the Cactus plants, and thinks we have a more choice collection than her own."

"O, I know Mrs. Middleton; she is too polite not to seem pleased with what is around her. I'll warrant she went home more satisfied than ever with her beautiful conservatory. I don't intend to go to the Middletons another time. Ida cannot

help comparing our common things with theirs whenever she is here. She is sure to drop me eventually, and I prefer to do that part myself." And then came a passionate burst of tears.

"Why, Kate, my child, how bitter you are! You do not deserve to know what Mrs. Middleton said of you. But to prove how far your distorted ideas have mislead you, I'll repeat her remarks for this once. In speaking of Ida, she said that her daughter often declared a preference for you over any other of her acquaintances, because of your uniform, bright spirits, and warm, unselfish heart." Then up sprang Katie.

"Did she really say that? O, I am very thankful! I'll try to make myself more worthy of such words than ever before."

"It is well to remember," said Mrs. Burton, "that your mother does not cultivate the acquaintance of people who have not the good sense to gauge our worth by what we are, and not by what we have or may not have."

"But, mother, when Mrs. Middleton was looking at your plants, were you not the least bit ashamed of those pots?"

"I did not once think of them. They are so nearly uniform in shape and size as to attract little attention, and I suspect that the lady was too much interested to have been able to tell afterward what kind of pots they were. I suppose I might have let my daughter dispense with ribbons and gloves, and have bought majolica pots for my plants—but it did not occur to me. I have for some time past been planning some changes in our home that will freshen it up somewhat. But now sit down here and let me tell you of some things I noticed during my recent visit to Boston, of which I have not yet spoken. In the finest park in the city I could not but observe that, interspersed

with the hedge of flowering-shrubs that skirts the whole, were old-fashioned Mari-golds, and Poppies, and Holyhocks. My daughter would have thought that a group of those in a corner of our garden would have been in doubtful taste. In the business part of the city, where one would least expect to see it, stands a mammoth reminder of an old-time country-garden. It is a tall, sturdy Sunflower covered with enormous blossoms, standing near the main entrance of a flower store, which a suburban florist kept supplied with cut flowers, hanging-baskets revelling in luxuriance, and pots of vines and flowering plants; and this had been chosen as a unique sign to attract customers. At the New England Floral Exhibition, held in Music Hall, I saw plants that were as strange to me, and quite as wonderful, as an Esquimaux would have been. Among these was a variety of variegated species which were stately in form, strangely beautiful in leaf-construction, and exquisitely mottled, or parti-colored, as the case might be. One leafless specimen seemed to have imitated the form of a boa constrictor. It was mottled green and white like our tri-cornered Partridge Cactus. I was told that they had been imported by a private citizen for his own delectation. I was also attracted by the great number of Pitcher Plants on exhibition. The smaller ones were in hanging-baskets suspended in a row. The large ones had thrown out, from the ends of the leaves, long, crooked arms supporting pitchers, as though just ready to start off for a spring of water. In contrast to such displays, when prowling around one day in quest of an old book shop, I saw in a little court between a house and alley a shapely and well-kept bed filled with alternate rows of Onions and Pansies."

"O, how absurd!"

"Not a all. I paused and gazed in admiration. The poor woman must have her Onions; they are healthful, and give a wonderful relish to plain fare, and the Pansies could flourish nicely in the necessary space between the rows. I longed for a sight of the woman herself. I felt sure I should see a clean apron, smooth hair and a pleasant eye. But there were other places that I visited. You have seemed tired of our old pictures. Though good of their kind, I had felt for some time that a change would be desirable;

so I looked into Osgood & Co.'s picture emporium, where lovers of art can find heliotype copies of celebrated works of the 'old masters,' and new, furnished at rates within the reach of all. But to an intelligent lover of pictures, one to whom the originals are inaccessible, the very fact of the origin and subject so dignifies the picture that it becomes invested with valuation quite beyond any actual outlay of the owner."

"And did you really procure some?"

"I did; and in good time you shall see them. But there come your father and brother, and we must give them a cheery welcome."

Meantime some little plans were brewing for Kate's birthday surprise. She was of that age when certain things are apt to be rated by the amount of admiration they excite in others. Mrs. Burton understood this, and had secured a fine Pitcher Plant, which was flourishing in secret, in the light of the little attic window. In order to foster in her daughter a true love for the cultivation of plants she had decided to give her the entire care of a small window-garden. For this purpose, she had the remaining leaf and top removed from an old-fashioned tea-table, and the bed lined with zinc and filled with rich earth. A little varnish completed the finish. The season of the "sere and yellow leaf" had come, and Mrs. Burton was a happy, busy woman with the duties that the season brought her. A part of her Geraniums and some other plants had been kept from blooming all summer, so that now, upon being removed to the house, they would be ready for business, instead of having to rest. Kate had been allowed to make a visit, with the understanding that she was to return in time to meet Ida on her birthday. Ida, indeed! As she entered the yard of her home on that memorable morning, it seemed that every girl she had ever known was there. There was a long table already arranged, and waiting for the coming viands in their time. After many greetings and congratulations, she was finally allowed to enter the house, where she found the rooms freshly papered, and where, in the simple, but exquisitely arranged parlor, a little independent taste had been exercised, despite the prevailing rage for oriental designs and decorations. The walls were simply elegant in a soft,

neutral tint, with different tones of the same shade outlining shapely panels, in the center of which hung the new pictures in their black and gilt frames. Very soon half a dozen girls were gathered around the Pitcher Plant, which had been honored with a majolica pot, and stood between the windows appropriately supported. Another group was gathered about a pair of Resurrection Plants which Kate's father had once brought from Mexico, and which were occasionally brought out for exhibition. To-day one of them had been left in the condition they always appear when dry; the other had been set with its roots in water, and had opened out quite flatly, until it nearly filled a saucer.

Kate found the dining-room gay with dark, richly-colored Japanese paper, and all about the rooms were placed attractive-looking plants, in shining, black pots, with a bright decoration on the front of each. Kate's quick eye observed on the large, vase-like pot of earth and water that held the Calla Lily, a gorgeous dragon-fly flitting above a bit of green, sedgy marsh. On a pot of woodsy Ferns was a Gipsy camp, with kettle hung and fire burning. On others were simply a great Moss Rose bud, a gay butterfly, a group of snails on a bit of bright, green moss, and so on, really making the rooms more attractive than many more gorgeously furnished ones.

It appears that her mother had pondered for a time whether she should buy a number of fancy pots of unsatisfactory shape for winter house-plants, or should expend the same amount on new picture-frames, and had decided on the latter. It also appears that, from past experience, she had learned that plants thrive nicely in glazed pots, with a few pebbles in the bottom, if watered discreetly, and are more cleanly for house use; and, also, that if painted, that paint will not scale off as from unglazed ones. From past experience, also, she selected but two sizes, and those from the straight-sided, gallon and half-gallon kitchen pottery. These she could arrange in a straight tier or in pyramid-form, and were altogether satisfactory at a trifling outlay. To finish them up she had only needed a little black paint mixed with varnish, some transfer pictures, and enough white varnish to protect their surfaces. A small

paint brush and a tiny one for varnish completed the outfit. Of course, extra sizes of pots were needed for Calla Lily, Oleander, etc.

As Kate looked around the rooms she saw and appreciated it all; and as she heard, every now and then, some voice exclaiming, "O, how lovely!" her feelings so overcame her that she had to rush off by herself for a few moments to indulge in a good cry, as she recalled that even while her mother was planning all this, she had been so discontented and moody. On her return to the company her mother pointed to her favorite rocker, and there hung Little Bo-Peep, hitherto unobserved. One glance across the room to Ida was sufficient.

Before the day ended the girls had formed a plan to get up a fair to raise funds for an organ for their school room. If they made a beginning, however small, it was sure to result in something at last, they said. In course of time the fair came off, and it was generally understood that the Lace Cactus that Kate's mother persuaded her to contribute, had sold for more than Ida's elaborate piece of embroidery, and the best part of it was, that no one was more glad than Ida herself.—
AUNT MARJORIE.

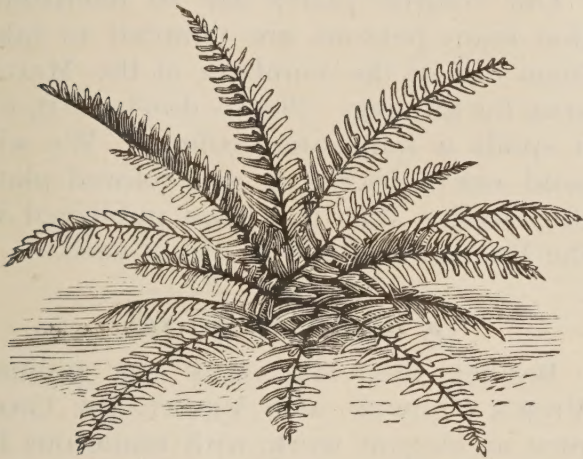
MY POCKET LENS.

You will be surprised what a pocket-lens will do for you. Try it. It will not cost much; a dollar or two, perhaps. I have grown to have a kind of reverence for mine. It lies quietly in my pocket, ready at all times to give me information and unfold to my astonished vision some very strange things. For instance, I was in the woods one day with my lens in my pocket and Dr. GRAY's botany under my arm. I sat down in the shade of the woods before a group of Ferns; they were dark, glossy, and exceedingly beautiful. Why should I not make their acquaintance? Dr. GRAY knows all about them. Why not I? I took out my lens and looked closely at some dark spots on the back of one of the Fern leaves, or fronds. These spots were somewhat kidney-shaped in form. I turned the leaves of my book to the page which had at the head the word *Filices*, meaning Ferns. Here I found that Dr. GREY to help students had pictured out some of the native

Ferns. Perhaps this very one would be here. Sure enough, here it was, looking precisely like the one before me! I gave my pocket-lens an affectionate look, and dear Dr. GRAY, if he had only been present just then—but I am told he is in Europe.

The lens, Dr. GRAY, and I grew to be excellent friends; we would go out together day after day. The more I learned about these Ferns the happier I became; we fell desperately in love with each other. I even dreamed about them once.

I had been used to ruthlessly pull out



CHRISTMAS FERN.

those graceful fronds for winter decorations, but now I could not; they had become sacred to my eyes, and must not be disturbed. Would they live through the winter storms, I queried, or would they die down to the roots? How would my pretty beauties act when Jack Frost touched them with his icy fingers? Jack Frost came and laid his icy grip upon them and they only smiled so disdainfully that it would do you good to see just how they looked in his bitter clasp—even more lovely than ever. The winter months did not keep me away from the woods. My Ferns are evergreen! Cold and frost pass by unheeded! beautiful, but strong and brave! I discovered, with Dr. GRAY's assistance, that they were the Christmas Ferns, and were sometimes called Holly Ferns, and that they had a long, peculiar Latin name, *Aspidium acrostichoides*.—M. H. S.

THE *London City Press* reports that the Superintendent of a certain jail states, that he never has any gardeners as prisoners. The *Gardeners' Monthly* says it is the same in this country, but thinks it may be because they are too sharp to be caught.



AUTUMN WOODS.

Ere, in the northern gale,
The summer tresses of the trees are gone,
The woods of autumn, all around our vale,
Have put their glory on.

The mountains that infold,
In their wide sweep, the colored landscape round,
Seem groups of giant kings, in purple and gold,
That guard the enchanted ground.

I roam the woods that crown
The uplands, where the mingled splendors glow,
Where the gay company of trees look down
On the green fields below.

My steps are not alone
In these bright walks; the sweet southwest, at play,
Flies, rustling, where the painted leaves are strewn
Along the winding way.

And far in heaven, the while,
The sun, that sends the gale to wander here,
Pours out on the fair earth his quiet smile—
The sweetest of the year.

Where now the solemn shade,
Verdure and gloom where many branches meet;
So grateful when the summer noon made
The valleys sick with heat?

Let in through all the trees
Come the strange rays; the forest depths are bright;
Their sunny-colored foliage, in the breeze,
Twinkles, like beams of light.

The rivulet, late unseen,
Where bickering through the shrubs its waters run,
Shines with the image of its golden screen,
And glimmering of the sun.

But 'neath yon crimson tree,
Lover to listening maid might breathe his flame,
Nor mark, within its roseate canopy,
Her blush of maiden shame.

Oh, autumn! why so soon
Depart the hues that make the forests glad,
Thy gentle wind and thy fair sunny noon
And leave thee wild and sad!

Ah! 'twere a lot too blest
Forever in thy colored shades to stray;
Amid the kisses of the soft southwest
To roam and dream for aye;

And leave the vain low strife
That makes men mad, the tug for wealth and power,
The passions and the cares that wither life,
And waste its little hour.

—BRYANT.

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